

Claims

I claim:

- 5 1. A coder assembly for printing on containers or on labels that can be applied to
containers, the coder assembly comprising:
- a base;
- a support member movably coupled to the base; and
- a coder supported by the support member and movable with the support
- 10 member relative to the base.
2. The coder assembly of claim 1, further comprising an adjustment mechanism
coupled between the coder and the support member and configured to adjust the position of
the coder with respect to the base.
- 15
3. The coder assembly of claim 2, wherein the adjustment mechanism is operable
to move the coder along a substantially horizontal axis and along a substantially vertical axis
without using tools.
- 20 4. The coder assembly of claim 2, wherein the adjustment mechanism is operable
to permit rotation of the coder about a substantially vertical axis.
5. The coder assembly of claim 1, wherein the support member is pivotally
coupled to the base.

25

6. The coder assembly of claim 1, wherein the coder assembly is adapted to be used with a bottling machine, the bottling machine defining a machine surface, and wherein the base is supported on the machine surface.

5 7. The coder assembly of claim 6, wherein the support member is cantilevered from the base and spaced from the machine surface such that no portion of the support member or the coder is in contact with the machine surface.

8. The coder assembly of claim 1, further comprising a latch mechanism
10 selectively locking the support member to the base so that the support member is substantially immovable with respect to the base.

9. The coder assembly of claim 8, wherein the latch mechanism is operable to selectively lock and unlock the support member without using tools.

15 10. The coder assembly of claim 1, further comprising a plurality of abutment members between the support member and the base, wherein the abutment members are configured to limit the spacing between the support member and the base.

20 11. The coder assembly of claim 10, wherein the plurality of abutment members are carried on a turret, and wherein the turret is adjustable to selectively position any one of the plurality of abutment members between the support member and the base.

25 12. The coder assembly of claim 10, wherein the plurality of abutment members comprise a plurality of set screws.

13. The coder assembly of claim 10, wherein a first abutment member spaces the support member from the base in a first operating position, and wherein a second abutment member spaces the support member from the base in a second operating position.

5 14. The coder assembly of claim 1, wherein the coder is supported by the support member in a substantially upright orientation.

15. The coder assembly of claim 1, wherein the coder is a laser coder.

10 16. The coder assembly of claim 1, wherein the support member is movable between a first operative position with respect to the base and a second operative position with respect to the base.

15

17. A coder assembly for printing on containers or on labels that can be applied to containers, the coder assembly comprising:

a base having a bottom surface supported by a machine surface;

a coder; and

5 a support member configured to support the coder, the support member cantilevered from the base and spaced from the machine surface such that no portion of the support member or the coder is in contact with the machine surface.

18. The coder assembly of claim 17, wherein the support member is movably
10 coupled to the base.

19. The coder assembly of claim 18, wherein the support member is pivotally coupled to the base.

15 20. The coder assembly of claim 18, further comprising a latch mechanism selectively locking the support member to the base so that the support member is substantially immovable with respect to the base.

21. The coder assembly of claim 20, wherein the latch mechanism is operable to
20 selectively lock and unlock the support member without using tools.

22. The coder assembly of claim 17, further comprising a plurality of abutment members between the support member and the base, wherein the abutment members are configured to limit the spacing between the support member and the base.

25

23. The coder assembly of claim 22, wherein the plurality of abutment members are carried on a turret, and wherein the turret is adjustable to selectively position any one of the plurality of abutment members between the support member and the base.

5 24. The coder assembly of claim 22, wherein the plurality of abutment members comprise a plurality of set screws.

25. The coder assembly of claim 22, wherein a first abutment member spaces the support member from the base in a first operating position, and wherein a second abutment
10 member spaces the support member from the base in a second operating position.

26. The coder assembly of claim 17, further comprising an adjustment mechanism coupled between the coder and the support member and configured to adjust the position of the coder with respect to the base.

15 27. The coder assembly of claim 26, wherein the adjustment mechanism is operable to move the coder along a substantially horizontal axis and along a substantially vertical axis without using tools.

20 28. The coder assembly of claim 26, wherein the adjustment mechanism is operable to permit rotation of the coder about a substantially vertical axis.

29. The coder assembly of claim 17, wherein the laser coder is supported by the support member in a substantially upright orientation.

30. The coder assembly of claim 17, wherein the coder is a laser coder.

31. A method of positioning a coder used for printing on containers or on labels that can be applied to containers, the method comprising:

positioning the coder on a support member that is movably coupled to a base, the support member movable between a locked position, in which the support member is substantially immovable with respect to the base, and an unlocked position, in which the support member is movable with respect to the base;

unlocking the support member from the base; and

moving the support member and the coder relative to the base.

32. The method of claim 31, further comprising:

providing an abutment member between the support member and the base; and

moving the support member to the locked position such that the abutment member abuts at least one of the support member and the base.

33. The method of claim 32, wherein the abutment member is a first abutment member, further comprising:

misaligning the first abutment member such that it will not engage at least one of the support member and the base when the support member is in the locked position; and

aligning a second abutment member such that it will engage at least one of the support member and the base when the support member is in the locked position.

34. The method of claim 31, further comprising:

moving the support member to the locked position; and

locking the support member to the base without using tools.

35. The method of claim 31, wherein unlocking the support member from the base occurs without the use of tools.

36. The method of claim 31, wherein moving the support member includes
5 pivoting the support member.

37. The method of claim 31, wherein the coder is a laser coder including a lens, and wherein moving the support member and the coder relative to the base provides access to the lens for cleaning.

10

38. The method of claim 31, further comprising:
adjusting the coder along a substantially horizontal axis without using tools;
adjusting the coder along a substantially vertical axis without using tools; and
rotating the coder about the substantially vertical axis.

15

39. The method of claim 31, further comprising:
supporting the base on a machine surface of a bottling machine; and
cantilevering the support member from the base such that no portion of the
support member or the coder is in contact with the machine surface.

20